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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/601,062	10/19/2000	Ariel Rosenberg	4297	5571

7590 09/04/2002

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New York, NY 10020-1182

EXAMINER
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NGUYEN, NGOC YEN M

ART UNIT	PAPER NUMBER
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1754

8

DATE MAILED: 09/04/2002

Please find below and/or attached an Office communication concerning this application or proceeding.

mk-8

## Office Action Summary

Application No.

09/601,062

Applicant(s)

ROSENBERG, ARIEL

Examiner

Ngoc-Yen M. Nguyen

Art Unit

1754

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

### Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

### Status

- 1) ☒ Responsive to communication(s) filed on 03 June 2002.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

### Disposition of Claims

- 4) ☒ Claim(s) 44-84 is/are pending in the application.
- 4a) Of the above claim(s) 65-84 is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 44-64 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

### Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- 11) ☐ The proposed drawing correction filed on \_\_\_\_\_ is: a) ☐ approved b) ☐ disapproved by the Examiner.  
If approved, corrected drawings are required in reply to this Office action.
- 12) ☐ The oath or declaration is objected to by the Examiner.

### Priority under 35 U.S.C. §§ 119 and 120

- 13) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).  
a) ☐ All b) ☐ Some \* c) ☐ None of:  
1. ☐ Certified copies of the priority documents have been received.  
2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.  
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).  
\* See the attached detailed Office action for a list of the certified copies not received.
- 14) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application).  
a) ☐ The translation of the foreign language provisional application has been received.
- 15) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121.

### Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892) 4) ☐ Interview Summary (PTO-413) Paper No(s). \_\_\_\_\_
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948) 5) ☐ Notice of Informal Patent Application (PTO-152)
- 3) ☐ Information Disclosure Statement(s) (PTO-1449) Paper No(s) \_\_\_\_\_ 6) ☒ Other: Irradiation mail

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### DETAILED ACTION

Applicant's election with traverse of Group I (claims 44-64) in Paper No. 7 is acknowledged. The traversal is on the ground(s) that in Group II, the claims do recite a halogen compound inlet and that chlorine, bromine or mixture thereof are the compound used for industrial halogenation with the presence of a halogenation catalyst. This is not found persuasive because the claims only require a means for introducing the catalyst, such as a pipe, but not require the presence of the catalyst itself.

The requirement is still deemed proper and is therefore made FINAL.

The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

Claims 49, 60 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

In claims 49, 60, it is unclear if the limitation recited after "preferably" is positively required.

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

Claims 44-60, 63-64 are rejected under 35 U.S.C. 103(a) as being unpatentable over Sloterdijk et al (4317,800) in view of DE 2,035,391.

Sloterdijk discloses a process for the disposal of waste material containing halogenated hydrocarbon by pyrolysis in the absence of molecular oxygen by the combination of steps of:

introducing said waste halogenated hydrocarbon into a pyrolysis zone wherein it is heated to a temperature at least sufficient to form a pyrolysis zone off-gas containing halide substantially all in the form of gaseous hydrogen halide, and a pyrolysis zone residue;

introducing waste metal into a heating zone wherein it is heated to a halogenation temperature whereat at least one component of said waste metal will react with said hydrogen halide to form the corresponding metal halogenide;

contacting said heated waste metal in a halogenation zone, which is separate from said pyrolysis zone, with said hydrogen halide containing pyrolysis zone off-gas whereby at least a portion of said waste metal is converted into at least one metal halogenide which is vaporized under the temperature applied, thereby forming a metal halogenide containing gas;

separating metal halogenide by condensation from said metal halogenide containing gas leaving a residual gas stream; and

utilizing at least a portion of the fuel value of said halogenated hydrocarbon to provide heat to at least one of said zones (note claim 1).

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The waste metal used in Sloterdijk can be multi-element waste, such as tin-plated copper wire, filler, stabilizer (note Example 1).

Sloterdijk '800 does not specifically disclose the step of shredding, crushing, milling, etc. the waste material before the pyrolysis step, however, such treatment is known and commonly used in the art in order to increase the surface area of the waste material, thereby facilitating the pyrolysis process.

The temperature of the pyrolysis step can be from 450 to 800°C and the pressure can be 1 kg/cm<sup>2</sup> (note Example 1 and Table in column 12). These values are well within the claimed range.

The pyrolysis in the Sloterdijk '800 is considered as the claimed "primary heat treatment".

The difference is Sloterdijk '800 does not disclose the presence of a catalyst in the halogenation zone.

DE '391 discloses a process of halogenating hard metal scrap. DE '391 teaches the presence of carbon in the halogenation zone (note claim 1).

It would have been obvious to one of ordinary skill in the art at the time of the invention was made further add a carbon catalyst in the halogenation step of Sloterdijk '800 because such addition is desired in an analogous process as suggested by DE '391.

Claims 44-64 are rejected under 35 U.S.C. 103(a) as being unpatentable over Sloterdijk '800 in view of DE '391 and Oeck (4,412,889).

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Sloterdijk and DE '391 are applied as stated above.

The difference not yet discussed is Sloterdijk does not disclose a waste material which contains Ag, Pd or Pt.

Oeck '889 discloses a process for pyrolyzing a waste material which contains Ag (note column 1, lines 5-16).

It would have been obvious to one of ordinary skill in the art at the time of the invention was made recover silver in the waste material using the process of Sloterdijk '800 because, as suggested by Oeck '889, Ag is desired to be recovered.

The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.

The references cited in the Search Report PCT/IL99/00045 issued May 28, 1999 have been considered, but will not be listed on any patent resulting from this application because they were not provided on a separate list in compliance with 37 CFR 1.98(a)(1). In order to have the references printed on such resulting patent, a separate listing, preferably on a PTO-1449 form, must be filed within the set period for reply to this Office action.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Ngoc-Yen M. Nguyen whose telephone number is (703) 308-2536. The examiner is currently on Part time schedule.

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If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Stanley Silverman can be reached on (703) 308-3837. The fax phone numbers for the organization where this application or proceeding is assigned are (703) 872-9310 for regular communications and (703) 872-9311 for After Final communications.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is (703) 308-0661.



Ngoc-Yen M. Nguyen  
Primary Examiner  
Art Unit 1754

nmn  
August 26, 2002

The following papers have not been made part of the permanent records of the United States Patent and Trademark Office (Office) for this application (37 CFR 1.52(a)) because of damage from the United States Postal Service irradiation process:

Mailroom Stamp Date

Certificate of Mailing Date

June 03, 2002

May 21, 2002

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The above-identified papers, however, were not so damaged as to preclude the USPTO from making a legible copy of such papers. Therefore, the Office has made a copy of these papers, substituted them for the originals in the file, and stamped that copy:

**COPY OF PAPERS  
ORIGINALLY FILED**

\_\_\_\_\_

If applicant wants to review the accuracy of the Office's copy of such papers, applicant may either inspect the application (37 CFR 1.14(d)) or may request a copy of the Office's records of such papers (*i.e.*, a copy of the copy made by the Office) from the Office of Public Records for the fee specified in 37 CFR 1.19(b)(4). Please do **not** call the Technology Center's Customer Service Center to inquiry about the completeness or accuracy of Office's copy of the above-identified papers, as the Technology Center's Customer Service Center will **not** be able to provide this service.

If applicant does not consider the Office's copy of such papers to be accurate, applicant must provide a copy of the above-identified papers (except for any U.S. or foreign patent documents submitted with the above-identified papers) with a statement that such copy is a complete and accurate copy of the originally submitted documents. If applicant provides such a copy of the above-identified papers and statement within **THREE MONTHS** of the mail date of this Office action, the Office will add the original mailroom date and use the copy provided by applicant as the permanent Office record of the above-identified papers in place of the copy made by the Office. Otherwise, the Office's copy will be used as the permanent Office record of the above-identified papers (*i.e.*, the Office will use the copy of the above-identified papers made by the Office for examination and all other purposes). This three-month period is not extendable.